City of San Diego Public Utilities Department

Smart Water Systems for the 21st Century Pilot Project

Presentation to NR&C Committee March 21, 2012

Study Background

- NR&C Presentations
 - September 28, 2011
 - Water Distribution System Water Loss ("Unaccounted for Water")
 - ➤ Brady/IBM SMART Water Systems for the 21st Century City
 - > November 9, 2011
 - Proposed Pilot Project Regarding Smart Water Systems for the 21st Century
- City Fiscal Year 2011 Unaccounted For Water 9.3%
- ➤ National Average (per USEPA) 14%

Study Background (cont.)

- Unaccounted for Water Distribution system water losses are typically defined as water that is "unaccounted for" when comparing water delivered into the distribution system to the sum of water sold to customers and unbilled authorized uses
- ➤ IBM Smart Water 'Proof of Concept' method of detecting leaks by continuously comparing operational data with water system hydraulic model and analyzing anomalies detected

Study Activities

Work Completed to Date

- ➤ Pilot Project Kick-Off Meeting January 24, 2012
- > System and Usage Data Transfer and Analysis
- Developed Data Collection Strategies
- ➤ Developed EPANET Model from City Model
- ➤ Ordered AMI Meters and Pressure Loggers
- ➤ Identified Meter Replacement Criteria

Study Schedule

- ➤ January 24, 2012 Pilot Project Kick-off
- April 2012 Installation of Meters and Pressure Loggers
- ➤ May 2012 Field Data Collection Start
- June/July 2012 Leak Model Calibration and Analysis
- September 2012 Final Report
- October 2012 NR&C Presentation



QUESTIONS?

